Colposcopic Appearance of Primary Tuberculosis of Cervix- Case Report

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ABSTRACT

Introduction: Primary tuberculosis of cervix is a rare disease with a very few case reported in the literature till date. Mostly seen in the developing world, colposcopy appearance of the affected cervix may mislead the treating physician towards carcinoma cervix until the histopathology report reveals this non neoplastic condition. **Case report:** We presented a case of post menopausal lady with chief complaint of persistent vaginal discharge with colposcopy findings of leukoplakia on cervix with surface irregularity which was not acetowhite and was devoid of any vessel abnormality. The patient was treated with 6 months of anti tubercular drug after cervix histology was positive for primary tuberculosis and got cured completely.

Conclusion: The unique presentation of leukoplakia without any malignant changes makes our case special as till date no cases of leukoplakia with a background of cervix tuberculosis has been reported in the literature.

Keywords: Colposcopy of cervical tuberculosis, Primary tuberculosis cervix

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INTRODUCTION

Primary cervical tuberculosis is a rare disease that is often wrongly diagnosed as invasive cancer. Till date there are very few reports in the literature on the colposcopic appearance of this condition.[1] In the present case report we have documented the colposcopic appearance of cervix before and after treatment of the infection.

CASE REPORT

A 45 year old multiparous lady presented at the outpatients department at Chittaranjan National Cancer Institute, India with a history of excessive vaginal discharge for 3 months along with loss of weight and general malaise for the same duration. Patient achieved her natural menopause 3 years back and was not on any medication. She had no history of tuberculosis, diabetes mellitus, and malignancy in the past or in the family.

On general survey no pallor or lymphadenopathy was detected. Other physical examination was within normal limit. On loco-regional examination there was a dense white patch of about 3 cm extending to all the four quadrants of the cervix without any extension to the vagina. On colposcopy the squamo-columnar junction was within the canal and could not be visualized (type 3 transformation zone) (Figure 1).

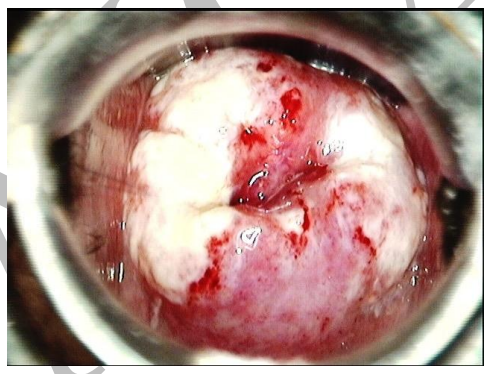

Figure1: Colposcopy appearance of cervix before starting anti tubercular drug

The surface of the lesion was irregular though the margin was not sharply demarcated. No abnormal vascular pattern was seen. Following application of acetic acid there was no change in the lesion. The lesion was iodine negative. Multiple punch biopsies were taken from the abnormality. The histopathology report showed features of granulation tissue and epithelioid granuloma consisting of Langhan's and foreign body giant cells, epithelioid cells and lympocytes (Figure2).

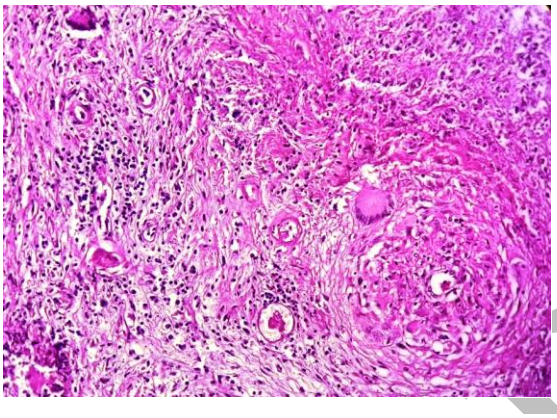

Figure 2: Granulamatous inflammation with giant cells

There were areas of necrosis as well as fibroblastic proliferation along with mixed inflammatory cell infiltrate and was positive for acid fast bacilli on Zeihl-Nelsson staining. There was no evidence of malignancy. Her endometrial tissue was sent for histology and was normal. Her sputum was negative for acid fast bacilli and chest Xray was normal. Her serology tests for HIV 1 and 2 were negative. She received anti tubercular drug in Category 1 regime (Isoniazide 600mg, Rifampicin 450mg, Pyrazinamide 1500mg and Ethambutol 1200mg combination for 2 months and Isoniazide and Rifampin combination for 4 months). To our surprise, one month post treatment of antitubercular drug cervix looked absolutely normal on colposcopy. After six months of anti tubercular treatment we repeated her colposcopy. Squamo-columnar junction was visualized within the canal (type 2 transformation zone) and the cervix was normal in appearance. (Figure 3).

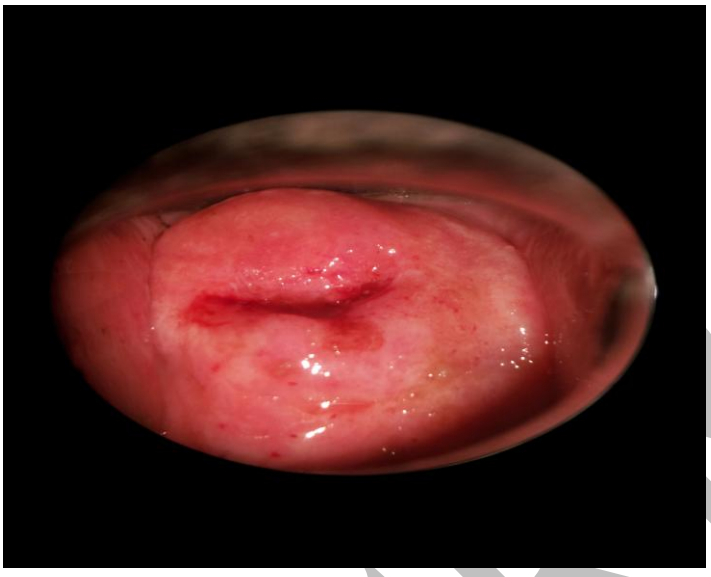

Figure 3: Colposcopy of cervix after 6 months of anti tubercular therapy

There was no acetowhite area. Her cervical biopsy this time was normal and was negative for acid fast bacilli. A proper informed consent was obtained from the patient to use her clinical findings for publication.

DISCUSSION

Genital tuberculosis is not uncommon in India. Fallopian tubes are the most commonly affected organ(95%-98%) followed by endometrium(20-25%) and ovaries(10-15%).[2,3]Cervix is rarely affected and that too by lymphatic spread or by direct extension from the endometrium.[4,5] In our case there was no evidence of either endometrial or pulmonary tuberculosis. The clinical diagnosis often becomes erroneous, as symptoms and clinical examination do not give any clue to the disease.[6] Moreover because of its macroscopic appearance, the initial lesion often misdiagnosed as invasive disease of cervix. As we have seen in our case, the colposcopy diagnosis is also quite non-specific. No change after acetic acid application, absence of abnormal vascular pattern, dense white lesion occupying the cervix (even before acetic acid application) were the features that helped us to suspect a non-neoplastic condition. The diagnosis is usually done by histological evidence of granulomatous inflammation with caseation without any malignant cells. Though the isolation of mycobacterium is considered to

be the gold standard for diagnosing cervical tuberculosis, in one third of cases the culture may be negative.[7]The disease responds well to anti tubercular drugs and the cervix regains its normal look on colposcopy within six months of starting anti-tubercular drug.

CONCLUSION

Primary cervical tuberculosis, though rare, still comes as a close differential diagnosis of invasive cervical cancer. A high index of suspicion is required to detect the disease. If treated appropriately, cervical tuberculosis responds very well to anti tubercular drugs and patient becomes symptom free soon after starting anti tubercular therapy.

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